

## Updates

### US/China EcoPartnership on Wetland

December 17, 2013

With the support of governments of China and the US, specifically the US Secretariat of EcoPartnership, Tulane University and East China Normal University (ECNU, [www.shues.org/epwr](http://www.shues.org/epwr)), and the dedicated team of EcoPartners in the US and China, our EcoPartnership made significant progresses in the last quarter of 2013 and we are ready to move forward in 2014 and beyond with added focus. China has opened a few Carbon Emission Permit exchanges already as well as the anticipated international agreement on climate change in 2015 (replacing the Kyoto Protocol) we are going to engage in the research, monitor, report and verification of large CO<sub>2</sub> sinks base in wetlands. Further, clean water resources are critical to the stability of urbanization, we will also focus on the eco-development/demonstrate of modular multi-level water purification systems simulating the natural wetland purification process. River flow and tidal zones have potential for hydrokinetic energy generation, we will aim to formulate an integrated approach, with the ultimate purpose of technology/equipment demonstration and commercial deployments, of large scale eco-development with clean water, clean energy as well as carbon sinks.

The following is a summary of our activities.

- I. On October 17, 2013, Tulane University hosted a Workshop on US-China Trade and Energy. Ambassador Zhou Wenzhong, Secretary General of the Boao Forum for Asia and former Ambassador from China to the United States, said the two countries could accomplish a lot working jointly on energy. But, he said, business transactions should not be politicized. "China is more open to investment than the United States is," he said. "I hope many in the United States government and Congress will do away with their zero-sum-game mentality."

The Chinese delegation was hosted by Tulane Law School's Payson Center for International Development; the Tulane Energy Institute; the Freeman School of Business; and the Tulane/Xavier Center for Bioenvironmental Research. The panel attracted an audience of business executives, faculty and students and included former Ambassador Donald Ensenat (L '73), an attorney with Patton Boggs and formerly U.S. Chief of Protocol at the White House and the U.S. State Department.

Panelist Jin Liqun, Chairman of China International Capital Corporation Ltd. and former Deputy Minister of Finance, said that "We still have a lot to do to promote the well-being of our two peoples, but now we understand some of the issues." China's relationship with the United States "is not the same as the former USSR and the United States from the Cold War days," he said. "We want to work together."

Panelist Professor Zhou Dadi said China is improving energy efficiency to avoid unnecessary consumption and at the same time develop cleaner energy options – including looking to the U.S. for technology to explore shale gas sources.

Tulane has a longstanding relationship with China, specifically through the Chinese People's Institute of Foreign Affairs, or CPIFA, which organized the Chinese panelists. New partnerships are being developed, with CPIFA's support and the Chinese Consulate General in Houston, through Tulane Law School and its Payson Center. Those include a summer program for Tulane students in Beijing and Shanghai and joint law degree programs for Chinese students.

This visit was organized by Research Professor S.T. Hsieh, Founding Director of the US/China Energy and Environmental Technology Center (EETC) at the Payson Center. He also visited China in late October to continue work on EETC projects with the U.S. Department of Energy and in November to represent the Tulane Center of Bioenvironmental Research at the annual meeting at the East China Normal University in Shanghai of the US-China EcoPartnership on wetlands. He met with the Chinese panelists and CPIFA for follow-up actions, including featured a US mission focused on off-shore energy industry to attend the Boao Forum in 2015 ([www.boaoforum.org](http://www.boaoforum.org).) We also plan to hold the 9<sup>th</sup> annual meeting of our EcoPartnership at the Boao Forum.



II. The 7<sup>th</sup> Annual Meeting of US-China EcoPartnership on wetlands and Workshop on November 11-13, 2013.

Prof. Jian Jian Lu's team in China (Lyu Xianguo(Northeast Institute of Geography and Agroecology, CAS), Wang Anli (South China Normal University), Yuan Xingzhong(Chongqing University), Zhang Zhiguo(Shandong University), He Jianzong(The Open University of Hong Kong), Xiang Weining (East China Normal University), Liu Cunqi(Hebei University) Secretary general of the meeting: Wang Qiang

Director of the conference affairs: Wang Ru) worked with extreme efficiency and organized the break-through Annual Meeting including live-coverage at four different sites namely, Shanghai (ECNU Campus, registered participants more than 100), Hong Kong (Jockey Club Council Chamber, registered participants more than 40), Chongqing (Chongqing University Campus, registered participants more than 40) and Changchun (Changchun High-tech Zone, Conference Room, registered more than 30) along with global live plug-ins. Prof. Jian Jian Lu and Prof. S. T Hsieh co-chaired the Annual Meeting and Workshop. High lights of the opening session included speech by Prof. Shona Myers, President of INTERCOL, speech by Dr. Jiang Peng, environmental scientist at the Orange County (CA) Watersheds Program and President of the Los Angeles Environmental Protection Society, and reading of the endorsement letter by the US Secretariat of EcoPartnerships. Closing session was highlighted with speech by Prof. Chen Qun, President of ECNU and signing of MOU for new EcoPartners in Shanghai, Hong Kong and Chongqing, respectively. For detailed agenda please visit <http://cwrc.xweb.cn/english/agenda/201310/2013102415.html>.

Since the formation of the US-China EcoPartnership on wetland in 2008, we have focused on academic research of wetlands in the USA and China stressing basic sciences, foreign species, preservation and restoration of wetlands. We recognize that wetland is the only ecological system on the earth that equipped with aerobic and anaerobic processes with the unique capacity of water purifications. Our ultimate goal is to reduce climate change impacts with eco-development of wetlands. Theme of the 7<sup>th</sup> annual meeting and workshop is as follows:

- A. Eco-friendly clean energy technology in the coastal and tidal zones for eco-development.
- B. Ocean carbon sink for CO<sub>2</sub> emission trading coupled with water purification capacity.
- C. Development of high altitude multi-level carbon sink coupled with water purification technology.
- D. Promote the eco-development of regions with constrained water resources such as isolated small islands and deserts.

Reports of major interest include:

- A. Regional Eco-Development from theory to practice: eco-development of wetlands breaking the CO<sub>2</sub> emission constraints, Prof. Lu Jian Jian of ECNU.
- B. Eco-Development of islands: Zhu Wantou Island, Ladrone Islands in South China Sea, Prof. Wang Anli, South China Normal University.
- C. Demonstration Base of wetland carbon-sink forests in the hydro-fluctuation belt of the Three Gorges, Prof. Yuan Xingzhong, Chongqing University.
- D. San Joaquin Marsh and Wildlife Sanctuary: a combined demonstration base of carbon sinks, water purification and conservation, Prof. A. Bowler, The University of California, Irvine, CA, USA.
- E. Samos Island: An Island of Renewable Energy and Resources, Prof. Sven Erik Jorgensen, the University of Copenhagen, Denmark.
- F. Fundamental changes of disturbed wetland ecological system and its potential impacts of carbon cycle, Prof. He Chiquan, Shanghai University.
- G. A wetland carbon cycle model for predicting global warming effects, Prof. Zhang Jiarrui, ECNU.
- H. A conceptual ecological model for combined carbon sinks and water purification, Dr. Wang Qiang, ECNU.
- I. Updates on wetland ecological system for comprehensive sewage treatment and bio-energy, Prof. He Jianzong, the Open University of Hong Kong.
- J. Degenerative process and ecological restoration of coastal wetlands of the Yellow River delta, Mr. Yu Jun, Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences.

- K. Conservation and eco-friendly utilization of wetlands associated with the Three Gorges Reservoir, Prof. J. H. Martin Wilson, School of Resource and Environmental Studies, Dalhousie University.
- L. The restoration of mangrove forests and carbon sink studies, Mr. Liao Wenbao, South China Research Institute of Tropical Forestry, Chinese Academy of Forestry.
- M. CO2 Emission trading protocol development for wetlands in Louisiana based on mangroves, Prof. Andrew Englande, Tulane University.





III. Future Activities: February 21-22, 2014: China Water Issues, Tulane Law School Summit.

The Summit is Tulane Law School's premier student run conference. Each year, the summit hosts panels of speakers from a range of environmental areas. Last year we hosted twenty panels, two keynote speakers, and had over 600 attendees. This year, the focus is on water issues. Prof. S. T. Hsieh plans to participate on a panel discussing the impact of China's energy sector on national water resources, specifically how the Chinese government is seeking to limit the adverse effects of hydroelectric powers. The Summit always try to present two sides to each panel, so this panel will have one person representing historical observations as to China's hydroelectric power expansion, and another on how China is seeking to remedy or limit the problems associated with this expansion. This upcoming summit will take place on February 21st-22nd, and will include plenty of environmental talk.

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